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09/236373

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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STEVEN W WEINRIEB
SCHWARTZ 7 WEINRIEB
2001 JEFFERSON DAVIS HWY
CRYSTAL PLAZA ONE SUITE 1109
ARLINGTON VA 22202

QM02/0312

EXAMINER

PRICE, C

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 03/12/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/236,373

Applicant(s)

BUHLER, BRUCE A.

Examiner

CARL D. PRICE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Reissue Application

Continuing Obligation under 37 CFR 1.56 to

1. Applicant is reminded of the continuing obligation under 37 CFR 1.56 to timely apprise the Office of any litigation information, or other prior or concurrent proceeding, involving Patent No. 5,755,568, which is material to patentability of the claims under consideration in this reissue application. This obligation rests with each individual associated with the filing and prosecution of this application for reissue. See MPEP §§ 1404, 1442.01 and 1442.04.

Reissue Declaration

It is noted the applicant has stated, **in the response filed on 11-01-2000 (page 20, lines 9-13)**, that the reissue declaration filed with this application is **proper and not defective** because it contains the statements required under 37 CFR 1.175(a)(1) as to applicant's belief that the original patent is **wholly or partly inoperative or invalid** and they **arose without deceptive intention** on the part of the applicant. See 37 CFR 1.175 and see MPEP § 1414. Applicant points to the “printed form declaration”.

Written Consent of all Assignees

2. Applicant argues that this application included the **written consent of the sole assignee, ILLONOIS TOOL WORKS, INC.**, owning an undivided interest in the patent under 37 CFR 1.172(a) and proper chain of title of the assignees in compliance with 37 CFR 1.172 and 3.73. Applicant states “The reel and frame numbers for the last-noted assignment from **ARCSMITH** to **ILLONOIS TOOL WORKS, INC.**” being provided as “**Reel 9463, Frame 0188.**” Applicant states that this information was not presented at the time of filing the Reissue Application because the “such was recorded in the Office just prior to filing the Reissue

Application wherein the recorded assignment was not as yet returned to the current assignee ...”.

Surrender of the Original Patent

3. It is noted that this reissue **application was filed with the required offer to surrender the original patent** or, if the original is lost or inaccessible, an affidavit or declaration to that effect. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Note: In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Defective Reissue Declaration

4. The reissue oath/declaration filed with this application is defective because it fails to contain a statement that all errors which are being corrected in the reissue application **up to the time of filing of the declaration** arose without any deceptive intention on the part of the applicant. See 37 CFR 1.175 and MPEP § 1414. The phrase “**up to the time of filing of the declaration**” has not been included on the declaration.

Reissue Claims Rejected

5. Claims 1-26 are rejected under 35 U.S.C. 251 as being improperly broadened in a reissue application made and sworn to by the assignee and not the patentee. A claim is broader in scope than the original claims if it contains within its scope any conceivable product or process which would have infringed the original patent. A claim is broadened if it is broader in any one respect even though it may be narrower in other respects. Note that in the Reissue Declaration applicant is attempting to broaden the claims based on 1) deleting the phrase “said inner peripheral surface having several ... spaced from one another,” (claim 9(amended), line 14-17), 2) deleting the term “point” (claim 6(amended)), 3) deleting the terms “extends trough”, “point” and “angularly” (claim 11(amended)), 4) deleting the terms “”oxygen passageway”, “oxygen control means” (claim 13) and 5) the first and second closed ends of the torch tip head” (claim 9).

Claims Rejected-Defective Declaration

6. Claims 1-26 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

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The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

Supplemental Declaration under 37 CFR 1.175(b)(1)

7. A supplemental declaration is required. Receipt of such a supplemental declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

DETAILED ACTION

Response to Arguments

8. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the prior of record fails to show **"the critical difference"** between it and the claimed invention. In particular, applicant states that in the present invention **"The orifices are disposed within the same first plane of the tip head, but the flames are projected outwardly**

at an angle to the axis of the tip head so as to intercept the member being heated at an axial position which is disposed within a second plane axially removed or remote from the first plane of the tip head and orifices.”.

9. The newly discovered prior art references of JAPANESE ‘810, JAPANESE 910, JAPANESE ‘705, LYNCH and BRADFORD ET AL are now relied on to address the invention as now set forth in the claims as amended.

10. It is noted that while the limitations of the claims added by amendment present new matter as to the orientation of the flames and orifices relative to the burner head (i.e.- first plane, second plane, outward direction, etc.) the prior art cited in the rejection of the claims hereinbelow is selected to overcome these limitations as well as those which would be supported (e.g.- flames directed radially inward to a common point within the curved burner ring). See for example, JAPANESE ‘705 which discloses and shows flames directed angularly from a first burner head plane to a second heater member interacting plane (figure 2) and alternatively flames being arranged and oriented to be directed radially inward and along a first plane to intersect the heated surface (figure 4). See the rejection of the claims hereinbelow.

Drawings

11. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the ports being angularly oriented to generate flames extending from first to a second plane, etc. and the flames projecting “outwardly” with respect to the first plane to achieve heating along the second plane (see, for example, the last paragraph of claim 1 (amended)) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

a. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)-(c):

(a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

(b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment

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of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.

(c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

13. **The specification is objected to under 37 CFR 1.71** because, for example, the ports being angularly oriented to generate flames extending from first to a second plane, etc. and the flames projecting “outwardly” with respect to the first plane to achieve heating along the second plane (see, for example, the last paragraph of claim 1 (amended)) was not described in the specification as originally filed.

14. **The amendment filed 11-01-2000 is objected to under 35 U.S.C. 132** because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: For example, the ports being angularly oriented to generate flames extending from first to a second plane, etc. and the flames projecting “outwardly” with respect to the first plane to achieve heating along the second plane (see, for example, the last

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paragraph of claim 1 (amended)) was not described in the specification as originally filed.

Applicant is required to cancel the new matter in the reply to this Office Action.

15. **Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph,** as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. For example, the ports being angularly oriented to generate flames extending from first to a second plane, etc. and the flames projecting “outwardly” with respect to the first plane to achieve heating along the second plane (see, for example, the last paragraph of claim 1 (amended)) was not described in the specification as originally filed.

35 U.S.C. 112, second paragraph,

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 1,9,13,16,20 and 23, the phrase "to project flames outwardly therefrom at a predetermined angle" causes the claim to be indefinite since it is unclear what direction would necessarily constitute "outwardly". All of the claims should be reviewed for further and similar informalities.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over JAPANESE '810, JAPANESE 910, JAPANESE '705 in view of LYNCH and Falk et al (of record).

JAPANESE '810, JAPANESE 910, JAPANESE '705 disclose the invention substantially as set forth in the claims with possible exception to the curve of the torch head extending through "less than about 280 degrees", the torch head having separate fuel gas and oxygen supply passages therein and control means on the torch head and associated with each of the fuel gas and oxygen passages to selectively block the flow therethrough.

19. JAPANESE '810, JAPANESE 910, JAPANESE '705 show and/or disclose torch heads and handles having separate fuel gas and oxygen supply passages therein and control means on the torch head and associated with each of the fuel gas and oxygen passages to selectively block the flow therethrough. Japanese '810 includes a tip stem (1) communicating with the fuel and oxygen passages (5,6) and connected to an arcuate shaped tip head (Figure 9) extending through more than 180 degrees and having at least a first, second and third angularly spaced orifices (41) which open toward a common point. And, JAPANESE '705, in particular, discloses and shows flames directed angularly from a first burner head plane to a second heater member intersecting plane (figure 2) and alternatively flames being arranged and oriented to be directed radially inward and along a first plane to interest the heated surface (figure 4). See the rejection of the claims hereinbelow.

LYNCH ET AL teaches(figures 8,9; column 6,lines 43-50), from the same torch head field of endeavor as JAPANESE '810, JAPANESE 910, JAPANESE '705, alternative or selectively forming the semi-circular segment of the burner head to be greater than 180 degrees.

Falk et al teaches, from the same torch head field of endeavor as JAPANESE '810, JAPANESE 910, JAPANESE '705, forming a integral torch head and handle tube (11) to include separate fuel gas and oxygen supply passages (21,25) therein and control means (40,55) on the torch head and associated with each of the fuel gas and oxygen passages to selectively block or control the flow therethrough. Falk et al includes a tip stem (29) communicating with the fuel and oxygen passages and connected to a tip head (34) having a flame orifice.

20. In regard to claims 1-26, for the purpose of forming an integral torch head and handle tube, it would have been obvious to one with ordinary skill in the art to modify the torch head and handle of teaches, from the same torch head field of endeavor as JAPANESE '810, JAPANESE 910, JAPANESE '705, to include a integral torch head and handle tube having separate fuel gas and oxygen supply passages therein and control means on the torch head/handle tube associated with each of the fuel gas and oxygen passages to selectively block or control the flow therethrough. In regard to claims 1-26, since the number, relative orientation,

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spacing, burner arc length, etc. would depend on numerous design concerns such as the such as the size or circumference of an article to be heated, the type of fuel burned, the amount of heat to be applied to the article heated, the flame size, the desired distribution of heat over the heated surface, etc., to space the orifices at an angle of 100 degrees, an angle of 120 degrees, less than about 280 degrees, at least about 245 degrees, attaching the stem at a point midway between a second and third orifice, etc. can be viewed as nothing more than mere matters of choice in design absent the showing of any new or unexpected results produced therefrom over the prior art of record. Indeed, it would have been obvious to a person having ordinary skill in the art to configure the burner heads of teaches, from the same torch head field of endeavor as JAPANESE '810, JAPANESE 910, JAPANESE '705, to have a angle of curvature less than about 280 degrees in view of the teaching of LYNCH (figure 8). Also, the recitation "for heating a member attendant a metal bonding operation" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976)

and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). And, the claim limitation that heating is “within and along said second plane, attendant a metal bonding operation to be achieved along said second plane.”, is a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Japanese '375, German '629, Japanese '015 (single figure and abstract), Bradford et al and Smith all show curved torch tips attached to torch heads.

THIS ACTION IS MADE FINAL

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

USPTO CONTACTS

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is 703-3081953. The examiner can normally be reached on 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703-308-1935. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3463 for regular communications and 703-305-3463 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1148/0858.



CARL D. PRICE
Primary Examiner
Art Unit 3743

CP
January 29, 2001